

ABSTRACT OF THE DISCLOSURE

The present invention alters the flow path at the inlet of the sheet glass forming apparatus to improve quality. The bottom of the downcomer pipe is preferably shaped to alter the character of the vortex flow in the quiescent flow zone between the pipes. In another embodiment, a bead guide provides hydraulic stresses that are in opposition to the surface tension stress and thus reduces the influence of surface tension on the formation of thick beads on the edges of the sheet. The present invention also measures the temperature of the glass by immersing thermocouples in the glass, at locations where any defects caused by the immersion are in the glass that forms the unusable edges of the sheet. In another embodiment, the support structure for the trough is altered to substantially reduce the aging of the trough due to thermal creep.